# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 7,064,486 B1 Page 1 of 7

APPLICATION NO.: 09/641685
DATED: June 20, 2006
INVENTOR(S): Mabry

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Title page, showing an illustrative figure, should be deleted and substitute therefor the attached Title page.

In the drawings, sheets 1 to 7, replace informal Figures 1 to 7 with Formal Figures 1 to 7 attached.

Signed and Sealed this

First Day of September, 2009

David J. Kappos

David J. Kappos Director of the United States Patent and Trademark Office

## (12) United States Patent Mabry

(10) Patent No.:

US 7,064,486 B1

(45) Date of Patent:

Jun. 20, 2006

## (54) LOCKING DEVICE FOR MICROCHANNEL PLATE IN IMAGE AMPLIFIER TUBE

(75) Inventor: Thomas Theodore Mabry, Roanoke,

VA (US)

(73) Assignee: ITT Manufacturing Enterprises, Inc.,

Wilmington, DE (US)

(\*) Notice: Subject to any disclaimer, the term of this

patent is extended or adjusted under 35 U.S.C. 154(b) by 1190 days.

(21) Appl. No.: 09/641,685 (22) Filed: Aug. 18, 2000

(51) Int. Cl.

H01J 31/50 (2006.01)

(52) U.S. Cl. ...... 313/544; 313/477 R; 313/524

(58) Field of Classification Search ...... 313/370,

313/534, 103 CM, 528, 544, 530, 116, 377, 313/379, 541, 105 CM

See application file for complete search history.

#### References Cited (56)

## U.S. PATENT DOCUMENTS

5,402,034 A 3/1995 Blouch et al.

5,404,072 A \* 4/1995 Flanary et al. ......... 313/477 R

6,040,657 A 3/2000 Vrescak et al.

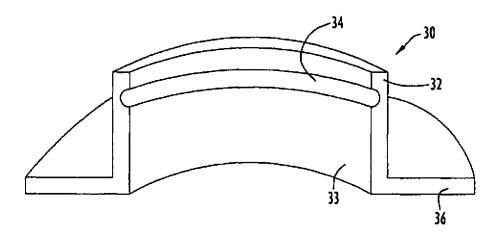
· cited by examiner

Primary Examiner-Vip Patel Assistant Examiner-Ken Berck

## ABSTRACT

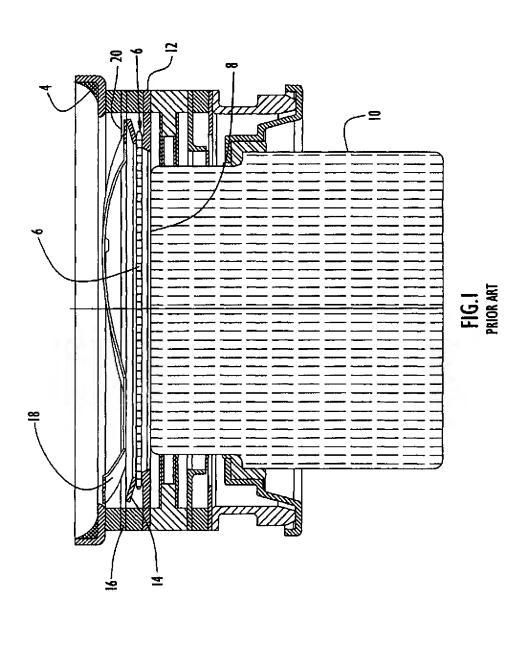
An image intensifier tube comprising a housing which holds a photocathode and a screen, wherein a microchannel plate is supported in a recess in an interior surface of an annular collar which is also held in the housing.

## 11 Claims, 5 Drawing Sheets



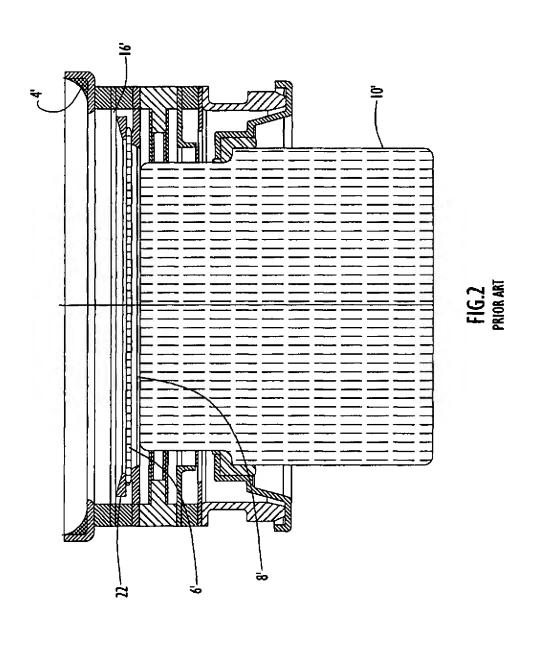
U.S. Patent

Jun. 20, 2006 Sheet 1 of 5



U.S. Patent

Jun. 20, 2006 Sheet 2 of 5



**U.S. Patent** 

Jun. 20, 2006

Sheet 3 of 5

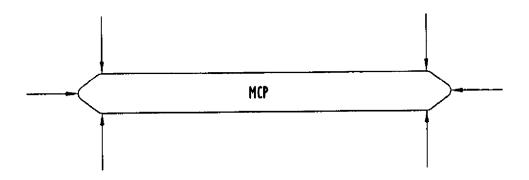


FIG.3
PRIOR ART

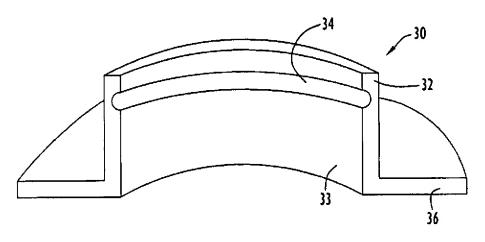
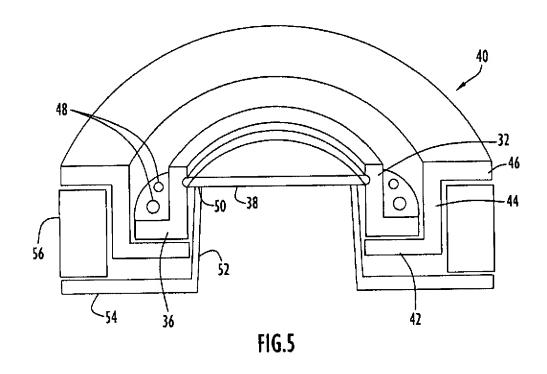


FIG.4

**U.S. Patent** 

Jun. 20, 2006

Sheet 4 of 5



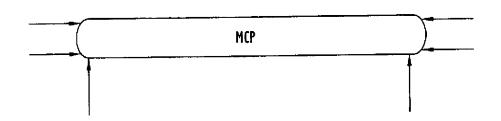


FIG.6